In view of the foregoing, early and favorable consideration of the above-identified application is requested.

Respectfully submitted,

by____________________

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MARKED-UP CLAIMS

4. (Amended) A method as claimed in claims 1 or 2 [1, 2 or 3], wherein the sacrificial filler does not interact chemically with the silicone rubber precursor or with the resultant silicone rubber and is stable at temperatures used to cure the resultant mixture.

5. (Amended) A method as claimed in claims 1 or 2 [any one of the preceding claims], wherein the sacrificial filler is granular and, preferably, crystalline.

6. (Amended) A method as claimed in claims 1 or 2 [any one of claims 1-4], wherein the sacrificial filler is amorphous.

7. (Amended) A method as claimed in claims 1 or 2 [any one of the preceding claims], wherein the sacrificial filler is ground and, preferably, classified, prior to contacting the silicone rubber precursor.

9. (Amended) A method as claimed in claim 7 [claims 7 or 8], wherein the sacrificial filler is milled to a pore size of 0.01-10 μm, preferably 0.05-1 μm, and most preferably 0.1-0.4 μm.

10. (Amended) A method as claimed in claim 8 [claims 8 or 9], wherein the sacrificial filler is an inorganic salt and is milled in an organic solvent.

11. (Amended) A method as claimed in claim 1 [any one of the preceding claims], wherein the sacrificial filler is an inorganic salt selected from the group consisting of metal halides, metal carbonates and metal bicarbonates.

15. (Amended) A method as claimed in claim 1 [any one of the preceding claims] wherein the sacrificial metal is removed by dissolution, preferably in an aqueous solvent.

18. (Amended) A method as claimed in claim 1 [any one of the preceding claims] wherein free – OH groups of the silicone rubber are chemically modified, so as to enhance cell adherence.

19. (Amended) A method as claimed in claim 1 [any one of the preceding claims] wherein the surface of the silicone rubber is charged by bombardment with electrons.

20. (Amended) A method as claimed in claim 1 [any one of the preceding claims] wherein the silicone rubber precursor comprises at least one additive that is not removed with the sacrificial filler and serves to impart desired physical properties to the rubber.

25. (Amended) A method as claimed in claim 1 [any one of the preceding claims] wherein a surface of the silicone rubber precursor is contacted with the sacrificial filler so as to form a structured silicone rubber having a textured surface.

32. (Amended) A method as claimed in claims 25 or 26 [any one of claims 25-31], wherein the textured surface is micro-cupulated, the micro-cupules having a depth of less than 1 mm, preferably a depth of 0.5-0.1 mm.

34. (Amended) A method as claimed in claim 1 [any one of claims 1-24], wherein the sacrificial filler is dispersed throughout the silicone rubber precursor, and the structured silicone rubber is substantially porous.

37. (Amended) A method as claimed in claims 34 or 35 [claims 34, 35 or 36], wherein the resultant mixture is shaped prior to curing, preferably by moulding or extrusion.

38. (Amended) A method as claimed in claims 34 or 35 [any one of claims 34-37], wherein the pores are 1 μm - 0.5 mm, preferably 10 μm - 0.2 mm, and most preferably 50 to 150 μm in diameter.

39. (Amended) A method as claimed in claims 34 or 35 [any one of claims 34-38], wherein the porous silicone rubber is cut to a desired size or shape.

41. (Amended) A textured or porous silicone rubber obtained or obtainable by a method according to claim 1 [any one of the preceding claims].

43. (Amended) A biomedical device or apparatus comprising a textured or porous silicone rubber as claimed in claim 41 [claims 41 or 42].

48. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-47], wherein the textured interior growth surface is a textured silicone rubber obtained or obtainable by a method according to claim 25 [any one of claims 25-33].

49. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-48], wherein at least one gas-permeable wall or portion of a wall is a silicone rubber membrane.

50. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-49], including at least one port extending between the interior and the exterior of the chamber.

53. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-52], in the form of a flexible bag or envelope, preferably made of silicone rubber.

54. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-53], including a valve means for release of gasses that build up within the chamber during use.

58. (Amended) A culture chamber as claimed in claim 44 [any one of claims 44-57] further comprising a second chamber separated from the first chamber by means of a semi-permeable membrane.

60. (Amended) An apparatus comprising a plurality of culture chambers as claimed in claim 44 [any of claims 44-59] for use in a method of culturing microbiological material.

64. (Amended) A method of culturing microbiological material in a culture chamber as claimed in claim 44 [any one of claims 44-59], or an apparatus as claimed in claim 60 [any one of claims 60-63].

66. (Amended) A method of carrying out a bio-processing operation in a culture chamber or an apparatus as claimed in claim 44 [any one of claims 44-63], which comprises attaching cells for performing the bio-processing function to the textured surface of the culture chamber(s), introducing liquor to be processed into the culture chamber(s) *via* an inlet, and collecting the processed liquor at an outlet from the culture chamber(s).

73. (Amended) A well as claimed in claim 71 [claims 71 or 72], wherein the membrane has a textured surface facing the interior of the well.

74. (Amended) A well as claimed in claim 70 [any one of claims 70-73], wherein the textured surface has a crater-like depression or micro-cupules.

75. (Amended) A well as claimed in claim 70 [any one of claims 70-74], wherein the textured surface is made by a method as claimed in claim 25 [any one of claims 25-33].

76. (Amended) A microtitre plate having at least one well as claimed in claim 70 [any one of claims 70-75].

77. (Amended) A method of culturing microbiological material on a well as claimed in claim 70 [any one of claims 70-75], or into a microtitre plate as claimed in claim 76.

81. (Amended) An implant device as claimed in claim 80, wherein the textured silicone rubber coating is made by a method as claimed in claim 25 [any one of claims 25-33].

82. (Amended) An implant device as claimed in claim 78 [any one of claims 78-81], wherein the device is a heart valve, a sternum implant, or a reconstructed calf ligament.

87. (Amended) A substrate as claimed in claim 84 [any one of claims 84-86], wherein the textured surface has crater-like depressions or micro-cupules.

88. (Amended) A substrate as claimed in claim 84 [any one of claims 84-87], wherein the textured surface is a textured silicone rubber made by a method as claimed in claim 25 [any one of claims 84-88].

89. (Amended) A skin graft grown on a substrate as claimed in claim 84 [any one of claims 84-88].

94. (Amended) A tissue support structure as claimed in claim 93, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

95. (Amended) An apparatus for culturing tissue or cellular agglomerates, comprising a tissue support structure as claimed in claim 90 [any one of claims 90-94], wherein the apparatus further comprises a gas-permeable membrane, to enhance oxygen supply to the system of pores and channels within the porous material, and therefore to the tissue.

100. (Amended) An apparatus as claimed in claim 95 [any one of claims 94-99] wherein a plurality of tissue support structures are arranged in close proximity to one another, so as to allow fusion between tissue or cell masses growing on each structure, to create larger tissue or cellular agglomerates.

103. (Amended) An artificial implant as claimed in claim 101, wherein the porous material is made by a method as claimed in claim 34 [claims 34-39].

106. (Amended) A cartilage implant as claimed in claim 104 [claims 104 or 105] for replacing eroded joints, wherein the porous silicone structure has been moulded to conform to the shape of the bone, which it is to protect.

107. (Amended) A cartilage implant as claimed in claim 104 [claims 104, 105 or 106], wherein the porous material has been moulded into the shape of a nasal bridge.

108. (Amended) A cartilage implant as claimed in claim 104 [claims 104, 105 or 106], wherein the porous material has been moulded into the shape of an ear.

111. (Amended) A vascular graft as claimed in claim 109 [claims 109 or 110], further providing an interior surface for cell adhesion.

113. (Amended) A vascular graft as claimed in claim 111 [claims 111 or 112], providing an exterior surface for cell adhesion.

115. (Amended) A vascular graft as claimed in claim 109 [any one of claims 109-114], wherein one or both surfaces of the graft are additionally roughened to enhance cell attachment, preferably by providing the graft with a textured silicone rubber surface.

118. (Amended) A cell implant means as claimed in claim 117, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

120. (Amended) A cell implant as claimed in claim 116 [any one of claims], for use as an endocrine implant.

126. (Amended) A drug implant as claimed in claim 123 [claims 123, 124 or 125], wherein the porous material comprises a porous silicone rubber.

127. (Amended) A drug delivery system as claimed in claim 126, wherein porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

129. (Amended) A filtration media as claimed in claim 128, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

131. (Amended) A filtration method as claimed in claim 128 [claims 128, 129 or 130], for use in magnetic separation.

133. (Amended) A filtration media as claimed in claim 128 [any one of claims 128-132], for use in expanded bed absorption.

135. (Amended) A filtration media as claimed in claim 128 [any one of claims 128-134], for use in static inline filtration.

137. (Amended) A filtration media as claimed in claim 128 [any one of claims 128-136], wherein the porous silicone rubber is in the form of annular discs.

140. (Amended) A cell cryopreservation system as claimed in claim 139, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

145. (Amended) An electrode as claimed in claim 144, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

146. (Amended) An electrode as claimed in claim 143 [claims 148, 149 or 150], wherein the conductive particles are metal or carbon powders.

148. (Amended) An electrode system comprising a plurality of electrodes as claimed in claim 143 [any one of claims 143-147] immersed in a liquid electrolyte and connected to an electric circuit.

151. (Amended) A wound dressing as claimed in claim 150, wherein the porous gel layer comprises porous silicone rubber gel, preferably made by a method as claimed in claim 34 [any one of claims 34-39].

153. (Amended) A wound dressing as claimed in claim 150 [claims 150, 151 or 152], wherein the carrier gel is applied to a supportive structure, preferably a Dacron® mesh.

154. (Amended) A wound dressing as claimed in claim 150 [any one of claims 150-153], wherein the porous gel layer is infused with a drug for delivery to the wound.

159. (Amended) A clinical swab as claimed in claim 158, wherein the porous silicone rubber is made by a method as claimed in claim 34 [any one of claims 34-39].

160. (Amended) A clinical swab as claimed in claim 157 [claims 157, 158 or 159] wherein the porous material contains a radio-opaque additive, preferably barium sulphate.

161. (Amended) A clinical swab as claimed in claim 157 [any one of claims 157-160], wherein the porous material is infused with a drug.